WIRING OPTIMIZATIONS FOR POWER

Abstract of the Disclosure

An electrical wiring structure and method of designing thereof. The method identifies at least one wire pair having a first wire and a second wire. The second wire is already tri-stated or can be tri-stated. The wire pair may have a same-direction switching probability per clock cycle that is no less than a predetermined or user-selected minimum same-direction switching probability. Alternatively, the wire pair may have an opposite-direction switching probability per clock cycle that is no less than a predetermined or user-selected minimum opposite-direction switching probability. The first wire and the second wire satisfy at least one mathematical relationship involving: a spacing between the first wire and the second wire; and a common run length of the first wire and the second wire.